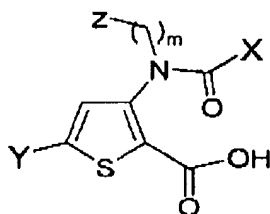


This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Original) A compound of formula:



or pharmaceutically acceptable salts thereof;

wherein;

Z is 3-7 membered heterocycle or 3-7 membered cycloalkyl;

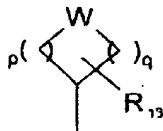
Y is 6-10 membered aryl;

X is 3-10 membered cycloalkyl;

m is an integer from 0-1;

provided that when Y is unsubstituted phenyl then X is other than 4-methylcyclohexane.

2. (Original) A compound according to claim 1, wherein Z is



wherein;

W is CR<sub>10</sub>R<sub>11</sub>, S(O)<sub>n</sub>, O or NR<sub>12</sub>;

wherein, n is 0-2;

R<sub>10</sub> and R<sub>11</sub> are each independently chosen from H, C<sub>1-6</sub> alkyl, C<sub>6-10</sub> aryl, C<sub>3-10</sub> heterocycle, C<sub>3-10</sub> heteroaralkyl, C<sub>6-10</sub> aralkyl, C(O)-C<sub>1-6</sub> alkyl, C<sub>1-6</sub> alkyloxy, hydroxyl or formyl; or R<sub>10</sub> and R<sub>11</sub> are taken together to form =O, =S or =N-Ra, wherein Ra is H, hydroxyl or C<sub>1-6</sub> alkyl; R<sub>12</sub> is H, C<sub>1-6</sub> alkyl, C<sub>6-14</sub> aryl, C<sub>3-12</sub> heterocycle, C<sub>3-12</sub> heteroaralkyl, C<sub>6-16</sub> aralkyl, C(O)-C<sub>1-6</sub> alkyl or C<sub>1-6</sub> alkyloxy;

P is an integer from 1-3;

q is an integer from 0-2;

R<sub>13</sub> is one or more optional substituent each of which is independently chosen from halogen, nitro, nitroso, SO<sub>2</sub>Rf, SO<sub>2</sub>Rf, PO<sub>3</sub>RcRd, CONRgRh, C<sub>1-6</sub> alkyl, C<sub>2-6</sub> alkenyl, C<sub>2-6</sub> alkynyl, C<sub>6-12</sub> aralkyl, C<sub>6-12</sub> aryl, C<sub>1-6</sub> alkyloxy, C<sub>2-6</sub> alkenyloxy, C<sub>2-6</sub> alkynyloxy, C<sub>6-12</sub> aryloxy, C(O)C<sub>1-6</sub> alkyl, C(O)C<sub>2-6</sub> alkenyl, C(O)C<sub>2-6</sub> alkynyl, C(O)C<sub>6-12</sub> aryl, C(O)C<sub>6-12</sub> aralkyl, C<sub>3-10</sub> heterocycle, hydroxyl, NRgRh, C(O)ORf, cyano, azido, amidino or guanido;

wherein Rf, Rc, Rd, Rg and Rh in each case is H, C<sub>1-6</sub> alkyl, C<sub>2-6</sub> alkenyl, C<sub>2-6</sub> alkynyl, C<sub>6-10</sub> aryl, C<sub>3-10</sub> heterocycle, C<sub>3-10</sub> heteroaralkyl or C<sub>6-10</sub> aralkyl;

or Rc and Rd are taken together with the oxygens to form a 5 to 10 membered heterocycle;

or Rg and Rh are taken together with the nitrogen to form a 3 to 10 membered heterocycle.

3. (Original) A compound according to claim 1, wherein 2 is 6-7 membered heterocycle or 6-7 membered cycloalkyl.

4. (Original) A compound according to claim 1, wherein Z is cyclohexyl, piperidinyl, N-(C<sub>1-6</sub> alkyl)-piperidinyl, hexahydrothiopyranyl, azepanyl, methylazepanyl, N-(C<sub>1-6</sub> alkyl)-piperidinylmethyl, tetrahydropyranyl, piperidinylmethyl, pyridinyl, pyridinylmethyl, tetrahydrothiopyranyl, dioxolanylmethyl or dioxanylmethyl which in each case is unsubstituted or substituted by one or more substituent chosen from halogen, nitro, nitroso, SO<sub>2</sub>Rf, SO<sub>2</sub>Rf, PO<sub>3</sub>RcRd, CONRgRh, C<sub>1-6</sub> alkyl, C<sub>2-6</sub> alkenyl, C<sub>2-6</sub> alkynyl, C<sub>6-12</sub> aralkyl, C<sub>6-12</sub> aryl, C<sub>1-6</sub> alkyloxy, C<sub>2-6</sub> alkenyloxy, C<sub>2-6</sub> alkynyloxy, C<sub>6-12</sub> aryloxy, C(O)C<sub>1-6</sub> alkyl, C(O)C<sub>2-6</sub> alkenyl, C(O)C<sub>2-6</sub> alkynyl, C(O)C<sub>6-12</sub> aryl, C(O)C<sub>6-12</sub> aralkyl, C(O)NHRf, C<sub>3-10</sub> heterocycle, hydroxyl, NRGh, C(O)ORf, cyano, azido, amidino or guanido; wherein Rf, Rc, Rd, Rg and Rh in each case is H, C<sub>1-6</sub> alkyl, C<sub>2-6</sub> alkenyl, C<sub>2-6</sub> alkynyl, C<sub>6-10</sub> aryl, C<sub>3-10</sub> heterocycle, C<sub>3-10</sub> heteroaralkyl or C<sub>6-10</sub> aralkyl; or Rc and Rd are taken together with the oxygens to form a 5 to 10 membered heterocycle; or Rg and Rh are taken together with the nitrogen to form a 3 to 10 membered heterocycle.
5. (Original) A compound according to claim 1, wherein Z is cyclohexyl unsubstituted or substituted by one or more substituent chosen from halogen, SO<sub>2</sub>Rf, CONRgRh, C<sub>1-6</sub> alkyl, C<sub>6-12</sub> aralkyl, C<sub>6-12</sub> aryl, C<sub>1-6</sub> alkyloxy, C(O)C<sub>1-6</sub> alkyl, C<sub>3-10</sub> heterocycle, hydroxyl, NRGh, C(O)Orf or cyano; wherein Rf, Rg and Rh in each case is H or C<sub>1-6</sub> alkyl.
6. (Original) A compound according to claim 1, wherein Z is piperidinyl unsubstituted or substituted by one or more substituent chosen from halogen, SO<sub>2</sub>Rf, CONRgRh, C<sub>1-6</sub> alkyl,

C<sub>6-12</sub> aralkyl, C<sub>6-12</sub> aryl, C<sub>1-6</sub> alkyloxy, C(O)C<sub>1-6</sub> alkyl, C(O)NHRf, C<sub>3-10</sub> heterocycle, hydroxyl, NRgRh, C(O)Orf or cyano;

wherein Rf, Rg and Rh in each case is H or C<sub>1-6</sub> alkyl.

7. (Original) A compound according to claim 1, wherein Z is N-(C<sub>1-6</sub> alkyl)-piperidinyl unsubstituted or substituted by one or more substituent chosen from halogen, SO<sub>2</sub>Rf, CONRgRh, C<sub>1-6</sub> alkyl, C<sub>6-12</sub> aralkyl, C<sub>6-12</sub> aryl, C<sub>1-6</sub> alkyloxy, C(O)C<sub>1-6</sub> alkyl, C(O)NHRf, C<sub>3-10</sub> heterocycle, hydroxyl, NRgRh, C(O)Orf or cyano;  
wherein Rf, Rg and Rh in each case is H or C<sub>1-6</sub> alkyl.
8. (Original) A compound according to claim 4, wherein Z is cyclohexyl, piperidinyl or N-C<sub>1-6</sub> alkyl-piperidinyl.
9. (Original) A compound according to claim 1, wherein X is 6-membered cycloalkyl.
10. (Original) A compound according to claim 1, wherein X is cyclohexyl unsubstituted or substituted by one or more substituent chosen from halogen, nitro, nitroso, SO<sub>2</sub>Rf, SO<sub>2</sub>Rf, PO<sub>3</sub>RcRd, CONRgRh, C<sub>1-6</sub> alkyl, C<sub>2-6</sub> alkenyl, C<sub>2-6</sub> alkynyl, C<sub>6-12</sub> aralkyl, C<sub>6-12</sub> aryl, C<sub>1-6</sub> alkyloxy, C<sub>2-6</sub> alkenyloxy, C<sub>2-6</sub> alkynyloxy, C<sub>6-12</sub> aryloxy, C(O)C<sub>1-6</sub> alkyl, C(O)C<sub>2-6</sub> alkenyl, C(O)C<sub>2-6</sub> alkynyl, C(O)C<sub>6-12</sub> aryl, C(O)C<sub>6-12</sub> aralkyl, C(O)NHRf, C<sub>3-10</sub> heterocycle, hydroxyl, NRgRh, C(O)ORf, cyano, azido, amidino or guanido;  
wherein Rf, Rc, Rd, Rg and Rh in each case is H, C<sub>1-6</sub> alkyl, C<sub>2-6</sub> alkenyl, C<sub>2-6</sub> alkynyl, C<sub>6-10</sub> aryl, C<sub>3-10</sub> heterocycle, C<sub>3-10</sub> heteroaralkyl or C<sub>6-10</sub> aralkyl;  
or Rc and Rd are taken together with the oxygens to form a

- 5 to 10 membered heterocycle;  
or Rg and Rh are taken together with the nitrogen to form a  
3 to 10 membered heterocycle.
11. (Original) A compound according to claim 1, wherein X is cyclohexyl substituted by one or more substituent chosen from C<sub>1-6</sub> alkyl, halogen, C<sub>2-6</sub> alkenyl, C<sub>2-6</sub> alkynyl or C<sub>1-6</sub> alkyloxy.
12. (Original) A compound according to claim 1, wherein X is 4-methyl-cyclohexyl or 2-hydroxy-4-methyl-cyclohexyl.
13. (Original) A compound according to claim 1, wherein Y is phenyl unsubstituted or substituted by one or more substituent chosen from halogen, nitro, nitroso, SO<sub>3</sub>Rf, SO<sub>2</sub>Rf, PO<sub>3</sub>RcRd, CONRgRh, C<sub>1-6</sub> alkyl, C<sub>2-6</sub> alkenyl, C<sub>2-6</sub> alkynyl, C<sub>6-12</sub> aralkyl, C<sub>6-12</sub> aryl, C<sub>1-6</sub> alkyloxy, C<sub>2-6</sub> alkenyloxy, C<sub>2-6</sub> alkynyloxy, C<sub>6-12</sub> aryloxy, C(O)C<sub>1-6</sub> alkyl, C(O)C<sub>2-6</sub> alkenyl, C(O)C<sub>2-6</sub> alkynyl, C(O)C<sub>6-12</sub> aryl, C(O)C<sub>6-12</sub> aralkyl, C(O)NHRf, C<sub>3-10</sub> heterocycle, hydroxyl, NRgRh, C(O)ORf, cyano, azido, amidino or guanido;  
wherein Rf, Rc, Rd, Rg and Rh in each case is H, C<sub>1-6</sub> alkyl, C<sub>2-6</sub> alkenyl, C<sub>2-6</sub> alkynyl, C<sub>6-10</sub> aryl, C<sub>3-10</sub> heterocycle, C<sub>3-10</sub> heteroaralkyl or C<sub>6-10</sub> aralkyl;  
or Rc and Rd are taken together with the oxygens to form a 5 to 10 membered heterocycle;  
or Rg and Rh are taken together with the nitrogen to form a 3 to 10 membered heterocycle.
14. (Original) A compound according to claim 1, wherein Y is phenyl substituted by one or more substituent chosen from

halogen, nitro,  $\text{SO}_2\text{Rf}$ ,  $\text{C}_{1-6}$  alkyl,  $\text{C}_{1-6}$  alkyloxy,  $\text{C}(\text{O})\text{C}_{1-6}$  alkyl,  $\text{C}(\text{O})\text{Orf}$ , cyano or azido.

15. (Original) A compound according to claim 1, wherein Y is phenyl.
16. (Original) A compound according to claim 2, wherein P is 2 and q is 2.
17. (Original) A compound according to claim 2, wherein p is 3 and q is 2.
18. (Original) A compound according to claim 2, wherein W is  $\text{CR}_{10}\text{R}_{11}$  or  $\text{NR}_{12}$ ; wherein  $\text{R}_{10}$ ,  $\text{R}_{11}$  and  $\text{R}_{12}$  are as defined in claim 2.
19. (Original) A compound according to claim 2, wherein  $\text{R}_{10}$  is  $\text{C}_{1-3}$  alkyl,  $\text{C}_{6-10}$  aralkyl,  $\text{C}(\text{O})\text{-C}_{1-3}$  alkyl,  $\text{C}_{1-3}$  alkyloxy, hydroxyl or formyl; and  $\text{R}_{11}$  is H.
20. (Original) A compound according to claim 2, wherein  $\text{R}_{13}$  is one or more optional substituent each of which is independently chosen from halogen, nitro,  $\text{SO}_2\text{CH}_3$ ,  $\text{CONH}_2$ ,  $\text{CONHCH}_3$ ,  $\text{CONH}(\text{CH}_3)_2$ , methyl, ethyl, propyl, isopropyl, benzyl, phenyl, acetyl, methoxy, ethoxy, propyloxy, isopropyloxy, piperidinyl, piperazinyl, pyrrolidinyl, azetidinyl, aziridinyl, pyridinyl, , dioxanyl, dioxolanyl, azepanyl, hydroxyl,  $\text{NH}_2$ ,  $\text{N}(\text{H})\text{CH}_3$ ,  $\text{NH}(\text{CH}_3)_2$ , cyano or azido; wherein Rf, Rg and Rh are as defined in claim 2.
21. (Original) A compound according to claim 1, wherein:

Z is cyclohexyl unsubstituted or substituted by one or more substituent independently chosen from halogen, SO<sub>2</sub>Rf, CONRgRh, C<sub>1-6</sub> alkyl, C<sub>6-12</sub> aralkyl, C<sub>6-12</sub> aryl, C<sub>1-6</sub> alkyloxy, C(O)C<sub>1-6</sub> alkyl, C<sub>3-10</sub> heterocycle, hydroxyl, NRgRh, C(O)OR<sub>f</sub> or cyano;

wherein Rf, Rg and Rh in each case is H or C<sub>1-6</sub> alkyl;

Y is phenyl unsubstituted or substituted by one or more substituent independently chosen from halogen, nitro, SO<sub>2</sub>Rf, CONRgRh, C<sub>1-6</sub> alkyl, C<sub>6-12</sub> aralkyl, C<sub>6-12</sub> aryl, C<sub>1-6</sub> alkyloxy, C<sub>6-12</sub> aryloxy, C(O)C<sub>1-6</sub> alkyl, C(O)C<sub>6-12</sub> aryl, C(O)C<sub>6-12</sub> aralkyl, C(O)NHR<sub>f</sub>, C<sub>3-10</sub> heterocycle, hydroxyl, NRgRh, C(O)OR<sub>f</sub>, cyano, amidino or guanido;

wherein Rf, Rg and Rh in each case is H, C<sub>1-6</sub> alkyl, C<sub>6-10</sub> aryl, C<sub>3-10</sub> heterocycle, C<sub>3-10</sub> heteroaralkyl or C<sub>6-10</sub> aralkyl;

X is cyclohexyl unsubstituted or substituted by one or more substituent independently chosen from halogen, SO<sub>2</sub>Rf, CONRgRh, C<sub>1-6</sub> alkyl, C<sub>6-12</sub> aralkyl, C<sub>6-12</sub> aryl, C<sub>1-6</sub> alkyloxy, C<sub>6-12</sub> aryloxy, C(O)C<sub>1-6</sub> alkyl, C(O)C<sub>6-12</sub> aryl, C(O)C<sub>6-12</sub> aralkyl, C(O)NHR<sub>f</sub>, C<sub>3-10</sub> heterocycle, hydroxyl, NRgRh, C(O)OR<sub>f</sub>, cyano or azido;

wherein Rf, Rc, Rd, Rg and Rh in each case is H, C<sub>1-6</sub> alkyl, C<sub>6-10</sub> aryl, C<sub>3-10</sub> heterocycle, C<sub>3-10</sub> heteroaralkyl or C<sub>6-10</sub> aralkyl;

m is 0;

provided that when Y is unsubstituted phenyl then X is other than 4-methylcyclohexane.

22. (Original) A compound chosen from:

3 - { [(2-CARBOXY-5-PHENYL-THIOPHEN-3-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -METHYL} -PIPERIDINIUM;  
TRIFLUORO-ACETATE;  
2 - { [(2-CARBOXY-5-PHENYL-THIOPHEN-3-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -METHYL} -PIPERIDINIUM;  
TRIFLUORO-ACETATE;  
3 - [(4-METHYL-CYCLOHEXANECARBONYL) -PYRIDIN-3-YLMETHYL-AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3 - [(4-METHYL-CYCLOHEXANECARBONYL) -PYRIDIN-4-YLMETHYL-AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
5 - (3-FLUORO-PHENYL) -3 - [ISOPROPYL - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -THIOPHENE-2-CARBOXYLIC ACID;  
3 - [AZEPAN-4-YL - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3 - [(2,4-DICHLORO-BENZOYL) - [1,3]DIOXOLAN-2-YLMETHYL-AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3 - [[1,3]DIOXOLAN-2-YLMETHYL - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3 - [(1-FLUORO-4-METHYL-CYCLOHEXANECARBONYL) -ISOPROPYL-AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3 - [(1-FLUORO-4-METHYL-CYCLOHEXANECARBONYL) -ISOPROPYL-AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
4 - [(2-CARBOXY-5-PHENYL-THIOPHEN-3-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -1-METHYL-PIPERIDINIUM CHLORIDE;  
3 - [(2-ACETYLAMINO-4-METHYL-CYCLOHEXANECARBONYL) -ISOPROPYL-AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3 - [(4-METHYL-CYCLOHEXANECARBONYL) - (4-OXO-CYCLOHEXYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3 - [(4-METHYL-CYCLOHEXANECARBONYL) -PYRIDIN-2-YLMETHYL-AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;



3 - [(4-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(4-HYDROXYIMINO-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [ISOPROPYL - (4-METHYL-CYCLOHEX-3-ENECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(1-AZIDOMETHYL-2-METHYL-BUTYL) - (2,4-DICHLORO-BENZOYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

2 - [(2-Carboxy-5-phenyl-thiophen-3-yl) - (2-chloro-benzoyl) - amino] - 3-methyl-pentyl-ammonium trifluoroacetate;

3 - [(1-AMINOMETHYL-2-METHYL-BUTYL) - (2,4-DICHLORO-BENZOYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

{2 - [(2-CARBOXY-5-PHENYL-THIOPHEN-3-YL) - (2,4-DICHLORO-BENZOYL) - AMINO] - PROPYL} - TRIMETHYL-AMMONIUM; TRIFLUORO-ACETATE;

3 - [ISOPROPYL - (5-METHYL - [1,3] DIOXANE-2-CARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

4 - [(2-CARBOXY-5 - (4-FLUORO-PHENYL) - THIOPHEN-3-YL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 1-METHYL-PIPERIDINIUM CHLORIDE;

5 - (4-FLUORO-PHENYL) - 3 - [(2-HYDROXY-4-METHYL-CYCLOHEXANECARBONYL) - ISOPROPYL-AMINO] - THIOPHENE-2-CARBOXYLIC ACID;

3 - [(4-METHOXYIMINO-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

5 - (4-FLUORO-PHENYL) - 3 - [ISOPROPYL - (4-METHYL-CYCLOHEX-1-ENECARBONYL) - AMINO] - THIOPHENE-2-CARBOXYLIC ACID;

3 - [ISOPROPYL - (5-METHYL-TETRAHYDRO-PYRAN-2-CARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [ISOPROPYL - (4-METHYLENE-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [ISOPROPYL - (5-METHYL-TETRAHYDRO-PYRAN-2-CARBONYL) -AMINO] -  
5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3 - [ISOPROPYL - (5-METHYL-3,6-DIHYDRO-2H-PYRAN-2-CARBONYL) -  
AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3 - [(2-HYDROXY-4-METHYL-CYCLOHEXANECARBONYL) - (TETRAHYDRO-  
PYRAN-4-YL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3 - [(2-AZIDO-1-METHYL-ETHYL) - (4-METHYL-CYCLOHEXANECARBONYL) -  
AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3 - [(4-METHYL-CYCLOHEXANECARBONYL) - (1-METHYL-PIPERIDIN-4-  
YLMETHYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3 - [(4-METHYL-CYCLOHEXANECARBONYL) - (TETRAHYDRO-THIOPYRAN-4-  
YL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3 - { [(2-CARBOXY-5-PHENYL-THIOPHEN-3-YL) - (4-METHYL-  
CYCLOHEXANECARBONYL) -AMINO] -METHYL} -1-METHYL-PIPERIDINIUM  
CHLORIDE;  
3 - [(2-AMINO-1-METHYL-ETHYL) - (4-METHYL-CYCLOHEXANECARBONYL) -  
AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3 - [(4-METHYL-CYCLOHEXANECARBONYL) - (1-OXO-HEXAHYDRO-  
THIOPYRAN-4-YL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC  
ACID;  
4 - { [(2-CARBOXY-5-PHENYL-THIOPHEN-3-YL) - (4-METHYL-  
CYCLOHEXANECARBONYL) -AMINO] -METHYL} -1-METHYL-PIPERIDINIUM  
CHLORIDE;  
3 - [(1-ETHYL-PIPERIDIN-4-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -  
AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3 - [(1-ISOPROPYL-PIPERIDIN-4-YL) - (4-METHYL-  
CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC  
ACID;  
3 - [(4-METHYL-CYCLOHEXANECARBONYL) -PIPERIDIN-4-YL-AMINO] -5-  
PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [ [1 - (4-METHOXY-BENZYL) - 2-OXO-PIPERIDIN-4-YL] - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [ (2-AZIDO-1-METHYL-ETHYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

5 - (3-FLUORO-PHENYL) - 3 - [ (2-HYDROXY-4-METHYL-CYCLOHEXANECARBONYL) - ISOPROPYL-AMINO] - THIOPHENE-2-CARBOXYLIC ACID;

4 - [ (2-CARBOXY-5-#P: -TOLYL-THIOPHEN-3-YL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 1-METHYL-PIPERIDINIUM CHLORIDE;

3 - [ (4-METHOXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [ (4-METHYL-CYCLOHEXANECARBONYL) - (4-METHYL-CYCLOHEXYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [ (1-ACETYL-PIPERIDIN-4-YL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

4 - [ (2-CARBOXY-5-PHENYL-THIOPHEN-3-YL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 1-METHYL-AZEPANIUM CHLORIDE;

5 - (4-FLUORO-PHENYL) - 3 - [ (4-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - THIOPHENE-2-CARBOXYLIC ACID;

5 - (3-FLUORO-PHENYL) - 3 - [ (4-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - THIOPHENE-2-CARBOXYLIC ACID;

3 - [ (1-BENZYL-PIPERIDIN-4-YL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

5 - (4-FLUORO-PHENYL) - 3 - [ ISOPROPYL - (4-METHYL-CYCLOHEX-3-ENECARBONYL) - AMINO] - THIOPHENE-2-CARBOXYLIC ACID;

4 - [ [2-CARBOXY-5- (3-FLUORO-PHENYL) - THIOPHEN-3-YL] - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 1-METHYL-PIPERIDINIUM; CHLORIDE;

4- [ [2-CARBOXY-5- (4-METHOXY-PHENYL) -THIOPHEN-3-YL] - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -1-METHYL-PIPERIDINIUM; CHLORIDE;

4- [ [2-CARBOXY-5- (4-NITRO-PHENYL) -THIOPHEN-3-YL] - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -1-METHYL-PIPERIDINIUM; CHLORIDE;

4- [ [2-CARBOXY-5- (4-CHLORO-PHENYL) -THIOPHEN-3-YL] - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -1-METHYL-PIPERIDINIUM CHLORIDE;

4- [ [2-CARBOXY-5- (4-CYANO-PHENYL) -THIOPHEN-3-YL] - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -1-METHYL-PIPERIDINIUM CHLORIDE;

5- (4-CHLORO-PHENYL) -3- [ (4-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -THIOPHENE-2-CARBOXYLIC ACID;

3- [ (4-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5- (4-METHOXY-PHENYL) -THIOPHENE-2-CARBOXYLIC ACID;

5- (4-CYANO-PHENYL) -3- [ (4-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -THIOPHENE-2-CARBOXYLIC ACID;

3- [ (2-HYDROXY-4-METHYL-CYCLOHEXANECARBONYL) -ISOPROPYL-AMINO] -5- (4-METHOXY-PHENYL) -THIOPHENE-2-CARBOXYLIC ACID;

3- [ (1-FORMYL-PIPERIDIN-4-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3- [N', N'-Dimethyl-N-(4-methyl-cyclohexanecarbonyl)-hydrazino] -5-phenyl-thiophene-2-carboxylic acid;

3- [ (4-METHYL-CYCLOHEXANECARBONYL) - (1-METHYL-1-OXY-PIPERIDIN-4-YL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3- [ (4-METHYL-CYCLOHEXANECARBONYL) - (1-METHYL-1-OXY-PIPERIDIN-4-YL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3- [ (2-AMINO-CYCLOHEXYL) - (2,4-DICHLORO-BENZOYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(4-METHYL-CYCLOHEXANECARBONYL) - (1-OKO-HEXAHYDRO-THIOPYRAN-4-YL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
5 - (4-FLUOROPHENYL) - ((4-METHYL-CYCLOHEXANECARBONYL) -1-(METHYL-PIPERIDIN-3-YLMETHYL) -AMINO) -THIOPHENE-2-CARBOXYLIC ACID;  
3 - [(1-METHANESULFONYL-PIPERIDIN-4-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3 - [(1-METHYLCARBAMOYL-PIPERIDIN-4-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3 - [N-(2,4-Dichloro-benzoyl) -N',N'-dimethyl-hydrazino] -5-phenyl-thiophene-2-carboxylic acid;  
or pharmaceutically acceptable salts thereof.

23. (Original) A compound chosen from: 5-(4-FLUORO-PHENYL)-3-[(4-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -THIOPHENE-2-CARBOXYLIC ACID;  
3 - [(1-METHYLCARBAMOYL-PIPERIDIN-4-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3 - [(4-METHYL-CYCLOHEXANECARBONYL) - (1-METHYL-2-OKO-PIPERIDIN-4-YL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3 - [(4-CARBOXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3 - [(1-CYANO-PIPERIDIN-4-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3 - [(4-CARBOXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

5 - (3,4-DIFLUORO-PHENYL) - 3 - [(4-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - THIOPHENE-2-CARBOXYLIC ACID;

5' - ACETYL-4 - [(4-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - [2,2'] BITHIOPHENYL-5-CARBOXYLIC ACID;

3 - [(1-CARBAMOYL-PIPERIDIN-4-YL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(4-METHYL-CYCLOHEXANECARBONYL) - (7-OXO-AZEPAN-4-YL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(1-AMINOXYALYL-PIPERIDIN-4-YL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [ETHYL- (4-METHYL-BENZOYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

5 - (4-ACETYL-PHENYL) - 3 - [(4-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - THIOPHENE-2-CARBOXYLIC ACID;

3 - [(4-HYDROXY-4-METHYL-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(3-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

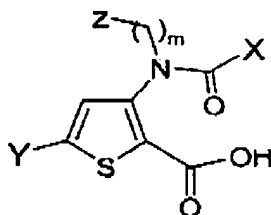
3 - [(4-HYDROXY-4-METHYL-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(3-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(3-HYDROXY-CYCLOPENTYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

or pharmaceutically acceptable salts thereof.

24. (Currently Amended) A compound as defined in ~~anyone of claims 1 to 23~~ Claim 1, wherein said pharmaceutically acceptable salt is sodium salt.
25. (Original) A method for treating or preventing a Flaviviridae viral infection in a host comprising administering to the host a therapeutically effective amount of at least one compound having the formula:



or pharmaceutically acceptable salts thereof;  
wherein;

Z is 3-7 membered heterocycle or 3-7 membered cycloalkyl;

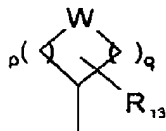
Y is 6-10 membered aryl;

X is 3-10 membered cycloalkyl;

m is an integer from 0-1;

provided that when Y is unsubstituted phenyl then X is other than 4-methylcyclohexane.

26. (Original) A method according to claim 25, wherein said pharmaceutically acceptable salts is sodium salt.
27. (Original) A method according to claim 25, wherein Z is



wherein;

W is CR<sub>10</sub>R<sub>11</sub>, S(O)<sub>n</sub>, O or NR<sub>12</sub>;

wherein, n is 0-2;

R<sub>10</sub> and R<sub>11</sub> are each independently chosen from H, C<sub>1-6</sub> alkyl, C<sub>6-10</sub> aryl, C<sub>3-10</sub> heterocycle, C<sub>3-10</sub> heteroaralkyl, C<sub>6-10</sub> aralkyl, C(O)-C<sub>1-6</sub> alkyl, C<sub>1-6</sub> alkyloxy, hydroxyl or formyl; or R<sub>10</sub> and R<sub>11</sub> are taken together to form =O, =S or -N-Ra, wherein Ra is H, hydroxyl or C<sub>1-6</sub> alkyl;

R<sub>12</sub> is H, C<sub>1-6</sub> alkyl, C<sub>6-14</sub> aryl, C<sub>3-12</sub> heterocycle, C<sub>3-12</sub> heteroaralkyl, C<sub>6-16</sub> aralkyl, C(O)-C<sub>1-6</sub> alkyl or C<sub>1-6</sub> alkyloxy;

p is an integer from 1-3;

q is an integer from 0-2;

R<sub>13</sub> is one or more optional substituent each of which is independently chosen from halogen, nitro, nitroso, SO<sub>3</sub>Rf, SO<sub>2</sub>Rf, PO<sub>3</sub>RcRd, CONRgRh, C<sub>1-6</sub> alkyl, C<sub>2-6</sub> alkenyl, C<sub>2-6</sub> alkynyl, C<sub>6-12</sub> aralkyl, C<sub>6-12</sub> aryl, C<sub>1-6</sub> alkyloxy, C<sub>2-6</sub> alkenyloxy, C<sub>2-6</sub> alkynyloxy, C<sub>6-12</sub> aryloxy, C(O)C<sub>1-6</sub> alkyl, C(O)C<sub>2-6</sub> alkenyl, C(O)C<sub>2-6</sub> alkynyl, C(O)C<sub>6-12</sub> aryl, C(O)C<sub>6-12</sub> aralkyl, C<sub>3-10</sub> heterocycle, hydroxyl, NRgRh, C(O)ORf, cyano, azido, amidino or guanido;

wherein Rf, Rc, Rd, Rg and Rh in each case is H, C<sub>1-6</sub> alkyl, C<sub>2-6</sub> alkenyl, C<sub>2-6</sub> alkynyl, C<sub>6-10</sub> aryl, C<sub>3-10</sub> heterocycle, C<sub>3-10</sub> heteroaralkyl or C<sub>6-10</sub> aralkyl;

or Rc and Rd are taken together with the oxygens to form a 5 to 10 membered heterocycle;



or Rg and Rh are taken together with the nitrogen to form a 3 to 10 membered heterocycle.

28. (Original) A method according to claim 25, wherein Z is 6-7 membered heterocycle or 6-7 membered cycloalkyl.
29. (Original) A method according to claim 25, wherein Z is cyclohexyl, piperidinyl, N-(C<sub>1-6</sub> alkyl)-piperidinyl, hexahydrothiopyranyl, azepanyl, methylazepanyl, N-(C<sub>1-6</sub> alkyl)-piperidinylmethyl, tetrahydropyranyl, piperidinylmethyl, pyridinyl, pyridinylmethyl, tetrahydrothiopyranyl, dioxolanylmethyl or dioxanylmethyl which in each case is unsubstituted or substituted by one or more substituent chosen from halogen, nitro, nitroso, SO<sub>3</sub>Rf, SO<sub>2</sub>Rf, PO<sub>3</sub>RcRd, CONRgRh, C<sub>1-6</sub> alkyl, C<sub>2-6</sub> alkenyl, C<sub>2-6</sub> alkynyl, C<sub>6-12</sub> aralkyl, C<sub>6-12</sub> aryl, C<sub>1-6</sub> alkyloxy, C<sub>2-6</sub> alkenyloxy, C<sub>2-6</sub> alkynyloxy, C<sub>6-12</sub> aryloxy, C(O)C<sub>1-6</sub> alkyl, C(O)C<sub>2-6</sub> alkenyl, C(O)C<sub>2-6</sub> alkynyl, C(O)C<sub>6-12</sub> aryl, C(O)C<sub>6-12</sub> aralkyl, C(O)NHRf, C<sub>3-10</sub> heterocycle, hydroxyl, NRgRh, C(O)ORf, cyano, azido, amidino or guanido; wherein Rf, Rc, Rd, Rg and Rh in each case is H, C<sub>1-6</sub> alkyl, C<sub>2-6</sub> alkenyl, C<sub>2-6</sub> alkynyl, C<sub>6-10</sub> aryl, C<sub>3-10</sub> heterocycle, C<sub>3-10</sub> heteroaralkyl or C<sub>6-10</sub> aralkyl; or Rc and Rd are taken together with the oxygens to form a 5 to 10 membered heterocycle; or Rg and Rh are taken together with the nitrogen to form a 3 to 10 membered heterocycle.
30. (Original) A method according to claim 25, wherein X is 6-membered cycloalkyl.

31. (Original) A method according to claim 25, wherein X is cyclohexyl unsubstituted or substituted by one or more substituent chosen from halogen, nitro, nitroso, SO<sub>3</sub>Rf, SO<sub>2</sub>Rf, PO<sub>3</sub>RcRd, CONRgRh, C<sub>1-6</sub> alkyl, C<sub>2-6</sub> alkenyl, C<sub>2-6</sub> alkynyl, C<sub>6-12</sub> aralkyl, C<sub>6-12</sub> aryl, C<sub>1-6</sub> alkyloxy, C<sub>2-6</sub> alkenyloxy, C<sub>2-6</sub> alkynyloxy, C<sub>6-12</sub> aryloxy, C(O)C<sub>1-6</sub> alkyl, C(O)C<sub>2-6</sub> alkenyl, C(O)C<sub>2-6</sub> alkynyl, C(O)C<sub>6-12</sub> aryl, C(O)C<sub>6-12</sub> aralkyl, C(O)NHRf, C<sub>3-10</sub> heterocycle, hydroxyl, NRgRh, C(O)ORf, cyano, azido, amidino or guanido; wherein Rf, Rc, Rd, Rg and Rh in each case is H, C<sub>1-6</sub> alkyl, C<sub>2-6</sub> alkenyl, C<sub>2-6</sub> alkynyl, C<sub>6-10</sub> aryl, C<sub>3-10</sub> heterocycle, C<sub>3-10</sub> heteroaralkyl or C<sub>6-10</sub> aralkyl; or Rc and Rd are taken together with the oxygens to form a 5 to 10 membered heterocycle; or Rg and Rh are taken together with the nitrogen to form a 3 to 10 membered heterocycle.
32. (Original) A method according to claim 25, wherein X is cyclohexyl substituted by one or more substituent chosen from C<sub>1-6</sub> alkyl, halogen, C<sub>2-6</sub> alkenyl, C<sub>2-6</sub> alkynyl or C<sub>1-6</sub> alkyloxy.
33. (Original) A method according to claim 25, wherein X is 4-methyl-cyclohexyl or 2-hydroxy-4-methyl-cyclohexyl.
34. (Original) A method according to claim 25, wherein Y is phenyl unsubstituted or substituted by one or more substituent chosen from halogen, nitro, nitroso, SO<sub>3</sub>Rf, SO<sub>2</sub>Rf, PO<sub>3</sub>RcRd, CONRgRh, C<sub>1-6</sub> alkyl, C<sub>2-6</sub> alkenyl, C<sub>2-6</sub> alkynyl, C<sub>6-12</sub> aralkyl, C<sub>6-12</sub> aryl, C<sub>1-6</sub> alkyloxy, C<sub>2-6</sub> alkenyloxy, C<sub>2-6</sub> alkynyloxy, C<sub>6-12</sub> aryloxy, C(O)C<sub>1-6</sub> alkyl, C(O)C<sub>2-6</sub> alkenyl, C(O)C<sub>2-6</sub> alkynyl, C(O)C<sub>6-12</sub> aryl, C(O)C<sub>6-12</sub>

aralkyl, C(O)NHRf, C<sub>3-10</sub> heterocycle, hydroxyl, NRgRh, C(O)ORf, cyano, azido, amidino or guanido; wherein Rf, Rc, Rd, Rg and Rh in each case is H, C<sub>1-6</sub> alkyl, C<sub>2-6</sub> alkenyl, C<sub>2-6</sub> alkynyl, C<sub>6-10</sub> aryl, C<sub>3-10</sub> heterocycle, C<sub>3-10</sub> heteroaralkyl or C<sub>6-10</sub> aralkyl; or Rc and Rd are taken together with the oxygens to form a 5 to 10 membered heterocycle; or Rg and Rh are taken together with the nitrogen to form a 3 to 10 membered heterocycle.

35. (Currently Amended) A method according to ~~anyone of claims 25 or 34~~ Claim 1, wherein said Flaviviridae viral infection is HCV.
36. (Original) A method for treating or preventing a Flaviviridae viral infection in a host comprising administering to the host a therapeutically effective amount of at least one compound chosen from:
- 3- { [(2-CARBOXY-5-PHENYL-THIOPHEN-3-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -METHYL} -PIPERIDINIUM; TRIFLUORO-ACETATE;
- 2- { [(2-CARBOXY-5-PHENYL-THIOPHEN-3-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -METHYL} -PIPERIDINIUM; TRIFLUORO-ACETATE;
- 3- [(4-METHYL-CYCLOHEXANECARBONYL) -PYRIDIN-3-YLMETHYL-AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
- 3- [(4-METHYL-CYCLOHEXANECARBONYL) -PYRIDIN-4-YLMETHYL-AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
- 5- (3-FLUORO-PHENYL) -3- [ISOPROPYL- (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -THIOPHENE-2-CARBOXYLIC ACID;
- 3- [AZEPAN-4-YL- (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(2,4-DICHLORO-BENZOYL) - (1,3]DIOXOLAN-2-YLMETHYL-AMINO] -  
5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3 - [(1,3]DIOXOLAN-2-YLMETHYL- (4-METHYL-CYCLOHEXANECARBONYL) -  
AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3 - [(1-FLUORO-4-METHYL-CYCLOHEXANECARBONYL) -ISOPROPYL-  
AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3 - [(1-FLUORO-4-METHYL-CYCLOHEXANECARBONYL) -ISOPROPYL-  
AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
4 - [(2-CARBOXY-5-PHENYL-THIOPHEN-3-YL) - (4-METHYL-  
CYCLOHEXANECARBONYL) -AMINO] -1-METHYL-PIPERIDINIUM CHLORIDE;  
3 - [(2-ACETYLAMINO-4-METHYL-CYCLOHEXANECARBONYL) -ISOPROPYL-  
AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3 - [(4-METHYL-CYCLOHEXANECARBONYL) - (4-OXO-CYCLOHEXYL) -  
AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3 - [(4-METHYL-CYCLOHEXANECARBONYL) -PYRIDIN-2-YLMETHYL-  
AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3 - [(4-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) -  
AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3 - [(4-HYDROXYIMINO-CYCLOHEXYL) - (4-METHYL-  
CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC  
ACID;  
3 - [ISOPROPYL- (4-METHYL-CYCLOHEX-3-ENECARBONYL) -AMINO] -5-  
PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3 - [(1-AZIDOMETHYL-2-METHYL-BUTYL) - (2,4-DICHLORO-BENZOYL) -  
AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
2 - [(2-Carboxy-5-phenyl-thiophen-3-yl) - (2-chloro-benzoyl) -  
amino] -3-methyl-pentyl-ammonium trifluoroacetate;  
3 - [(1-AMINOMETHYL-2-METHYL-BUTYL) - (2,4-DICHLORO-BENZOYL) -  
AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
{2 - [(2-CARBOXY-5-PHENYL-THIOPHEN-3-YL) - (2,4-DICHLORO-  
BENZOYL) -AMINO] -PROPYL} -TRIMETHYL-AMMONIUM; TRIFLUORO-  
ACETATE;

3 - [ISOPROPYL - (5-METHYL - [1,3] DIOXANE-2-CARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

4 - [ [2-CARBOXY-5 - (4-FLUORO-PHENYL) -THIOPHEN-3-YL] - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -1-METHYL-PIPERIDINIUM CHLORIDE;

5 - (4-FLUORO-PHENYL) -3 - [ (2-HYDROXY-4-METHYL-CYCLOHEXANECARBONYL) -ISOPROPYL-AMINO] -THIOPHENE-2-CARBOXYLIC ACID;

3 - [ (4-METHOXYIMINO-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

5 - (4-FLUORO-PHENYL) -3 - [ISOPROPYL - (4-METHYL-CYCLOHEX-1-ENECARBONYL) -AMINO] -THIOPHENE-2-CARBOXYLIC ACID;

3 - [ISOPROPYL - (5-METHYL-TETRAHYDRO-PYRAN-2-CARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [ISOPROPYL - (4-METHYLENE-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [ISOPROPYL - (5-METHYL-TETRAHYDRO-PYRAN-2-CARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [ISOPROPYL - (5-METHYL-3,6-DIHYDRO-2H-PYRAN-2-CARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [ (2-HYDROXY-4-METHYL-CYCLOHEXANECARBONYL) - (TETRAHYDRO-PYRAN-4-YL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [ (2-AZIDO-1-METHYL-ETHYL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [ (4-METHYL-CYCLOHEXANECARBONYL) - (1-METHYL-PIPERIDIN-4-YLMETHYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [ (4-METHYL-CYCLOHEXANECARBONYL) - (TETRAHYDRO-THIOPYRAN-4-YL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - { [ (2-CARBOXY-5-PHENYL-THIOPHEN-3-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -METHYL} -1-METHYL-PIPERIDINIUM CHLORIDE;

3 - [(2-AMINO-1-METHYL-ETHYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(4-METHYL-CYCLOHEXANECARBONYL) - (1-OXO-HEXAHYDRO-THIOPYRAN-4-YL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

4 - { [(2-CARBOXY-5-PHENYL-THIOPHEN-3-YL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - METHYL } - 1-METHYL-PIPERIDINIUM CHLORIDE;

3 - [(1-ETHYL-PIPERIDIN-4-YL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(1-ISOPROPYL-PIPERIDIN-4-YL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(4-METHYL-CYCLOHEXANECARBONYL) - PIPERIDIN-4-YL-AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(1-(4-METHOXY-BENZYL) - 2-OXO-PIPERIDIN-4-YL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(2-AZIDO-1-METHYL-ETHYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

5 - (3-FLUORO-PHENYL) - 3 - [(2-HYDROXY-4-METHYL-CYCLOHEXANECARBONYL) - ISOPROPYL-AMINO] - THIOPHENE-2-CARBOXYLIC ACID;

4 - [(2-CARBOXY-5-P-TOLYL-THIOPHEN-3-YL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 1-METHYL-PIPERIDINIUM CHLORIDE;

3 - [(4-METHOXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(4-METHYL-CYCLOHEXANECARBONYL) - (4-METHYL-CYCLOHEXYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(1-ACETYL-PIPERIDIN-4-YL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

4-[(2-CARBOXY-5-PHENYL-THIOPHEN-3-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-AZEPANUM CHLORIDE;  
5-(4-FLUORO-PHENYL)-3-[(4-HYDROXY-CYCLOHEXYL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-THIOPHENE-2-CARBOXYLIC ACID;  
5-(3-FLUORO-PHENYL)-3-[(4-HYDROXY-CYCLOHEXYL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-THIOPHENE-2-CARBOXYLIC ACID;  
3-[(1-BENZYL-PIPERIDIN-4-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
5-(4-FLUORO-PHENYL)-3-[ISOPROPYL-(4-METHYL-CYCLOHEX-3-ENECARBONYL)-AMINO]-THIOPHENE-2-CARBOXYLIC ACID;  
4-[(2-CARBOXY-5-(3-FLUORO-PHENYL)-THIOPHEN-3-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;  
4-[(2-CARBOXY-5-(4-METHOXY-PHENYL)-THIOPHEN-3-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;  
4-[(2-CARBOXY-5-(4-NITRO-PHENYL)-THIOPHEN-3-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;  
4-[(2-CARBOXY-5-(4-CHLORO-PHENYL)-THIOPHEN-3-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;  
4-[(2-CARBOXY-5-(4-CYANO-PHENYL)-THIOPHEN-3-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;  
5-(4-CHLORO-PHENYL)-3-[(4-HYDROXY-CYCLOHEXYL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-THIOPHENE-2-CARBOXYLIC ACID;  
3-[(4-HYDROXY-CYCLOHEXYL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-5-(4-METHOXY-PHENYL)-THIOPHENE-2-CARBOXYLIC ACID;  
5-(4-CYANO-PHENYL)-3-[(4-HYDROXY-CYCLOHEXYL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-THIOPHENE-2-CARBOXYLIC ACID;  
3-[(2-HYDROXY-4-METHYL-CYCLOHEXANECARBONYL)-ISOPROPYL-AMINO]-5-(4-METHOXY-PHENYL)-THIOPHENE-2-CARBOXYLIC ACID;

3- [(1-FORMYL-PIPERIDIN-4-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3- [N',N'-Dimethyl-N-(4-methyl-cyclohexanecarbonyl)-hydrazino] -5-phenyl-thiophene-2-carboxylic acid;

3- [(4-METHYL-CYCLOHEXANECARBONYL) - (1-METHYL-1-OXY-PIPERIDIN-4-YL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3- [(4-METHYL-CYCLOHEXANECARBONYL) - (1-METHYL-1-OXY-PIPERIDIN-4-YL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3- [(2-AMINO-CYCLOHEXYL) - (2,4-DICHLORO-BENZOYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3- [(4-METHYL-CYCLOHEXANECARBONYL) - (1-OXO-HEXAHYDRO-THIOPYRAN-4-YL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

5- (4-FLUOROPHENYL) - ((4-METHYL-CYCLOHEXANECARBONYL) -1-(METHYL-PIPERIDIN-3-YLMETHYL) -AMINO) -THIOPHENE-2-CARBOXYLIC ACID;

3- [(1-METHANESULFONYL-PIPERIDIN-4-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3- [(1-METHYLCARBAMOYL-PIPERIDIN-4-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3- [N-(2,4-Dichloro-benzoyl)-N',N'-dimethyl-hydrazino] -5-phenyl-thiophene-2-carboxylic acid;

or pharmaceutically acceptable salts thereof.

37. (Original) A method for treating or preventing a Flaviviridae viral infection in a host comprising administering to the host a therapeutically effective

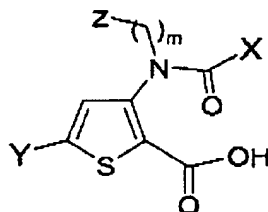


amount of at least one compound chosen from: 5-(4-FLUORO-PHENYL)-3-[(4-HYDROXY-CYCLOHEXYL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-THIOPHENE-2-CARBOXYLIC ACID;  
3-[(1-METHYLCARBAMOYL-PIPERIDIN-4-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3-[(4-METHYL-CYCLOHEXANECARBONYL)-(1-METHYL-2-OXO-PIPERIDIN-4-YL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3-[(4-CARBOXY-CYCLOHEXYL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3-[(1-CYANO-PIPERIDIN-4-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3-[(4-CARBOXY-CYCLOHEXYL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
5-(3,4-DIFLUORO-PHENYL)-3-[(4-HYDROXY-CYCLOHEXYL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-THIOPHENE-2-CARBOXYLIC ACID;  
5'-ACETYL-4-[(4-HYDROXY-CYCLOHEXYL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-[2,2']BITHIOPHENYL-5-CARBOXYLIC ACID;  
3-[(1-CARBAMOYL-PIPERIDIN-4-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3-[(4-METHYL-CYCLOHEXANECARBONYL)-(7-OXO-AZEPAN-4-YL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3-[(1-AMINOXALYL-PIPERIDIN-4-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3-[ETHYL-(4-METHYL-BENZOYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

5 - (4-ACETYL-PHENYL) - 3 - [(4-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - THIOPHENE-2-CARBOXYLIC ACID;  
3 - [(4-HYDROXY-4-METHYL-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3 - [(3-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3 - [(4-HYDROXY-4-METHYL-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3 - [(3-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3 - [(3-HYDROXY-CYCLOPENTYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
or pharmaceutically acceptable salts thereof.

38. (Currently Amended) A method according to ~~anyone of claims 36 or 37~~ Claim 36, wherein said pharmaceutically acceptable salts is sodium salt.
39. (Currently Amended) A method according to ~~anyone of claims 36 or 37~~ Claim 36, wherein said Flaviviridea viral infection is HCV.
40. (Currently Amended) A method according to ~~anyone of claims 25 or 34~~ Claim 36, further comprising administering at least one additional agent chosen from viral serine protease inhibitor, viral polymerase inhibitor, viral helicase inhibitor, immunomodulating agent, antioxydant agent, antibacterial agent, therapeutic vaccine, hepatoprotectant agent or antisense agent.

41. (Currently Amended) A method according to ~~anyone of claims 25 or 34~~ Claim 25, further comprising administering at least one additional agent chosen from interferon  $\alpha$ , ribavirin, silybum marianum, interleukine-12, amantadine, ribozyme, thymosin, N-acetyl cysteine or cyclosporin.
42. (Original) A method for inhibiting or reducing the activity of a flaviviridae viral polymerase in a host comprising administering a therapeutically effective amount of at least one compound having the formula:



or pharmaceutically acceptable salts thereof;  
wherein;

Z is 3-7 membered heterocycle or 3-7 membered cycloalkyl;

Y is 6-10 membered aryl;

X is 3-10 membered cycloalkyl;

m is an integer from 0-1;

provided that when Y is unsubstituted phenyl then X is other than 4-methylcyclohexane.

43. (Original) A method for inhibiting or reducing the activity of a flaviviridae viral polymerase in a host comprising

administering a therapeutically effective amount of at least one compound chosen from:

3 - { [(2-CARBOXY-5-PHENYL-THIOPHEN-3-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -METHYL} -PIPERIDINIUM;  
TRIFLUORO-ACETATE;  
2 - { [(2-CARBOXY-5-PHENYL-THIOPHEN-3-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -METHYL} -PIPERIDINIUM;  
TRIFLUORO-ACETATE;  
3 - [(4-METHYL-CYCLOHEXANECARBONYL) -PYRIDIN-3-YLMETHYL-AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3 - [(4-METHYL-CYCLOHEXANECARBONYL) -PYRIDIN-4-YLMETHYL-AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
5 - (3-FLUORO-PHENYL) -3 - [ISOPROPYL - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -THIOPHENE-2-CARBOXYLIC ACID;  
3 - [A2EPAN-4-YL - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3 - [(2,4-DICHLORO-BENZOYL) - [1,3]DIOXOLAN-2-YLMETHYL-AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3 - [[1,3]DIOXOLAN-2-YLMETHYL - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3 - [(1-FLUORO-4-METHYL-CYCLOHEXANECARBONYL) -ISOPROPYL-AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3 - [(1-FLUORO-4-METHYL-CYCLOHEXANECARBONYL) -ISOPROPYL-AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
4 - [(2-CARBOXY-5-PHENYL-THIOPHEN-3-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -1-METHYL-PIPERIDINIUM CHLORIDE;  
3 - [(2-ACETYLAMINO-4-METHYL-CYCLOHEXANECARBONYL) -ISOPROPYL-AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3 - [(4-METHYL-CYCLOHEXANECARBONYL) - (4-OXO-CYCLOHEXYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3 - [(4-METHYL-CYCLOHEXANECARBONYL) -PYRIDIN-2-YLMETHYL-AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(4-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(4-HYDROXYIMINO-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [ISOPROPYL - (4-METHYL-CYCLOHEX-3-ENECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(1-AZIDOMETHYL-2-METHYL-BUTYL) - (2,4-DICHLORO-BENZOYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

2 - [(2-Carboxy-5-phenyl-thiophen-3-yl) - (2-chloro-benzoyl) - amino] - 3-methyl-pentyl-ammonium trifluoroacetate;

3 - [(1-AMINOMETHYL-2-METHYL-BUTYL) - (2,4-DICHLORO-BENZOYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

{2 - [(2-CARBOXY-5-PHENYL-THIOPHEN-3-YL) - (2,4-DICHLORO-BENZOYL) - AMINO] - PROPYL} - TRIMETHYL-AMMONIUM; TRIFLUORO-ACETATE;

3 - [ISOPROPYL - (5-METHYL - [1,3]DIOXANE-2-CARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

4 - [(2-CARBOXY-5 - (4-FLUORO-PHENYL) - THIOPHEN-3-YL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 1-METHYL-PIPERIDINIUM CHLORIDE;

5 - (4-FLUORO-PHENYL) - 3 - [(2-HYDROXY-4-METHYL-CYCLOHEXANECARBONYL) - ISOPROPYL-AMINO] - THIOPHENE-2-CARBOXYLIC ACID;

3 - [(4-METHOXYIMINO-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

5 - (4-FLUORO-PHENYL) - 3 - [ISOPROPYL - (4-METHYL-CYCLOHEX-1-ENECARBONYL) - AMINO] - THIOPHENE-2-CARBOXYLIC ACID;

3 - [ISOPROPYL - (5-METHYL-TETRAHYDRO-PYRAN-2-CARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [ISOPROPYL - (4-METHYLENE-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [ISOPROPYL - (5-METHYL-TETRAHYDRO-PYRAN-2-CARBONYL) -AMINO] -  
5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3 - [ISOPROPYL - (5-METHYL-3,6-DIHYDRO-2H-PYRAN-2-CARBONYL) -  
AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3 - [(2-HYDROXY-4-METHYL-CYCLOHEXANECARBONYL) - (TETRAHYDRO-  
PYRAN-4-YL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3 - [(2-AZIDO-1-METHYL-ETHYL) - (4-METHYL-CYCLOHEXANECARBONYL) -  
AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3 - [(4-METHYL-CYCLOHEXANECARBONYL) - (1-METHYL-PIPERIDIN-4-  
YLMETHYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3 - [(4-METHYL-CYCLOHEXANECARBONYL) - (TETRAHYDRO-THIOPYRAN-4-  
YL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3 - { [(2-CARBOXY-5-PHENYL-THIOPHEN-3-YL) - (4-METHYL-  
CYCLOHEXANECARBONYL) -AMINO] -METHYL} -1-METHYL-PIPERIDINIUM  
CHLORIDE;  
3 - [(2-AMINO-1-METHYL-ETHYL) - (4-METHYL-CYCLOHEXANECARBONYL) -  
AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3 - [(4-METHYL-CYCLOHEXANECARBONYL) - (1-OXO-HEXAHYDRO-  
THIOPYRAN-4-YL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC  
ACID;  
4 - { [(2-CARBOXY-5-PHENYL-THIOPHEN-3-YL) - (4-METHYL-  
CYCLOHEXANECARBONYL) -AMINO] -METHYL} -1-METHYL-PIPERIDINIUM  
CHLORIDE;  
3 - [(1-ETHYL-PIPERIDIN-4-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -  
AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3 - [(1-ISOPROPYL-PIPERIDIN-4-YL) - (4-METHYL-  
CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOYLIC  
ACID;  
3 - [(4-METHYL-CYCLOHEXANECARBONYL) - PIPERIDIN-4-YL-AMINO] -5-  
PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [ [1 - (4-METHOXY-BENZYL) - 2-OXO-PIPERIDIN-4-YL] - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [ (2-AZIDO-1-METHYL-ETHYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

5 - (3-FLUORO-PHENYL) - 3 - [ (2-HYDROXY-4-METHYL-CYCLOHEXANECARBONYL) - ISOPROPYL-AMINO] - THIOPHENE-2-CARBOXYLIC ACID;

4 - [ (2-CARBOXY-5-P-TOLYL-THIOPHEN-3-YL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 1-METHYL-PIPERIDINIUM CHLORIDE;

3 - [ (4-METHOXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [ (4-METHYL-CYCLOHEXANECARBONYL) - (4-METHYL-CYCLOHEXYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [ (1-ACETYL-PIPERIDIN-4-YL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

4 - [ (2-CARBOXY-5-PHENYL-THIOPHEN-3-YL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 1-METHYL-AZEPANUM CHLORIDE;

5 - (4-FLUORO-PHENYL) - 3 - [ (4-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - THIOPHENE-2-CARBOXYLIC ACID;

5 - (3-FLUORO-PHENYL) - 3 - [ (4-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - THIOPHENE-2-CARBOXYLIC ACID;

3 - [ (1-BENZYL-PIPERIDIN-4-YL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

5 - (4-FLUORO-PHENYL) - 3 - [ ISOPROPYL - (4-METHYL-CYCLOHEX-3-ENECARBONYL) - AMINO] - THIOPHENE-2-CARBOXYLIC ACID;

4 - [ [2-CARBOXY-5 - (3-FLUORO-PHENYL) - THIOPHEN-3-YL] - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 1-METHYL-PIPERIDINIUM CHLORIDE;

4 - [ [2-CARBOXY-5-(4-METHOXY-PHENYL)-THIOPHEN-3-YL] - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -1-METHYL-PIPERIDINIUM; CHLORIDE;

4 - [ [2-CARBOXY-5-(4-NITRO-PHENYL)-THIOPHEN-3-YL] - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -1-METHYL-PIPERIDINIUM; CHLORIDE;

4 - [ [2-CARBOXY-5-(4-CHLORO-PHENYL)-THIOPHEN-3-YL] - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -1-METHYL-PIPERIDINIUM CHLORIDE;

4 - [ [2-CARBOXY-5-(4-CYANO-PHENYL)-THIOPHEN-3-YL] - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -1-METHYL-PIPERIDINIUM CHLORIDE;

5-(4-CHLORO-PHENYL)-3-[ (4-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -THIOPHENE-2-CARBOXYLIC ACID;

3-[ (4-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-(4-METHOXY-PHENYL)-THIOPHENE-2-CARBOXYLIC ACID;

5-(4-CYANO-PHENYL)-3-[ (4-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -THIOPHENE-2-CARBOXYLIC ACID;

3-[ (2-HYDROXY-4-METHYL-CYCLOHEXANECARBONYL) -ISOPROPYL-AMINO] -5-(4-METHOXY-PHENYL)-THIOPHENE-2-CARBOXYLIC ACID;

3-[ (1-FORMYL-PIPERIDIN-4-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3-[N',N'-Dimethyl-N-(4-methyl-cyclohexanecarbonyl)-hydrazino] -5-phenyl-thiophene-2-carboxylic acid;

3-[ (4-METHYL-CYCLOHEXANECARBONYL) - (1-METHYL-1-OXY-PIPERIDIN-4-YL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3-[ (4-METHYL-CYCLOHEXANECARBONYL) - (1-METHYL-1-OXY-PIPERIDIN-4-YL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3-[ (2-AMINO-CYCLOHEXYL) - (2,4-DICHLORO-BENZOYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;



3 - [ (4-CARBOXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

5 - (3,4-DIFLUORO-PHENYL) - 3 - [ (4-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - THIOPHENE-2-CARBOXYLIC ACID;

5' - ACETYL-4 - [ (4-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - [2,2'] BITHIOPHENYL-5-CARBOXYLIC ACID;

3 - [ (1-CARBAMOYL-PIPERIDIN-4-YL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [ (4-METHYL-CYCLOHEXANECARBONYL) - (7-OXO-AZEPAN-4-YL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [ (1-AMINOXALYL-PIPERIDIN-4-YL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [ETHYL- (4-METHYL-BENZOYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

5 - (4-ACETYL-PHENYL) - 3 - [ (4-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - THIOPHENE-2-CARBOXYLIC ACID;

3 - [ (4-HYDROXY-4-METHYL-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [ (3-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [ (4-HYDROXY-4-METHYL-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [ (3-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [ (3-HYDROXY-CYCLOPENTYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3-[(4-METHYL-CYCLOHEXANECARBONYL)-(1-OXO-HEXAHYDRO-THIOPYRAN-4-YL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
5-(4-FLUOROPHENYL)-[(4-METHYL-CYCLOHEXANECARBONYL)-1-(METHYL-PIPERIDIN-3-YLMETHYL)-AMINO]-THIOPHENE-2-CARBOXYLIC ACID;  
3-[(1-METHANESULFONYL-PIPERIDIN-4-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3-[(1-METHYLCARBAMOYL-PIPERIDIN-4-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3-[N-(2,4-Dichloro-benzoyl)-N',N'-dimethyl-hydrazino]-5-phenyl-thiophene-2-carboxylic acid;  
or pharmaceutically acceptable salts thereof.

44. (Original) A method for inhibiting or reducing the activity of a flaviviridae viral polymerase in a host comprising administering a therapeutically effective amount of at least one compound chosen from:

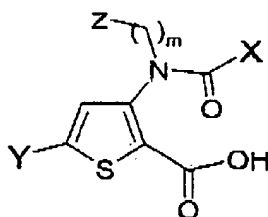
5-(4-FLUORO-PHENYL)-3-[(4-HYDROXY-CYCLOHEXYL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-THIOPHENE-2-CARBOXYLIC ACID;  
3-[(1-METHYLCARBAMOYL-PIPERIDIN-4-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3-[(4-METHYL-CYCLOHEXANECARBONYL)-(1-METHYL-2-OXO-PIPERIDIN-4-YL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3-[(4-CARBOXY-CYCLOHEXYL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3-[(1-CYANO-PIPERIDIN-4-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

or pharmaceutically acceptable salts thereof.

45. (Currently Amended) A method as defined in ~~anyone of claims 37 or 38~~ Claim 37, wherein said polymerase is a RNA-dependant RNA-polymerase.

46. (Currently Amended) A method as defined in ~~anyone of claims 37 or 38~~ Claim 37, wherein said polymerase is HCV polymerase.

47. (Original) A pharmaceutical composition comprising at least one compound having the formula:



or pharmaceutically acceptable salts thereof;

wherein;

Z is 3-7 membered heterocycle or 3-7 membered cycloalkyl;

Y is 6-10 membered aryl;

X is 3-10 membered cycloalkyl;

m is an integer from 0-1;

provided that when Y is unsubstituted phenyl then X is other than 4-methylcyclohexane,  
and at least one pharmaceutically acceptable carrier or excipient.

48. (Currently Amended) A pharmaceutical composition comprising at least one compound chosen from:

- 3 - { [(2-CARBOXY-5-PHENYL-THIOPHEN-3-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -METHYL} -PIPERIDINIUM; TRIFLUORO-ACETATE;
- 2 - { [(2-CARBOXY-5-PHENYL-THIOPHEN-3-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -METHYL} -PIPERIDINIUM; TRIFLUORO-ACETATE;
- 3 - [(4-METHYL-CYCLOHEXANECARBONYL) -PYRIDIN-3-YLMETHYL-AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
- 3 - [(4-METHYL-CYCLOHEXANECARBONYL) -PYRIDIN-4-YLMETHYL-AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
- 5 - (3-FLUORO-PHENYL) -3- [ISOPROPYL- (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -THIOPHENE-2-CARBOXYLIC ACID;
- 3 - [AZEPAN-4-YL- (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
- 3 - [(2,4-DICHLORO-BENZOYL) - [1,3]DIOXOLAN-2-YLMETHYL-AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
- 3 - [[1,3]DIOXOLAN-2-YLMETHYL- (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
- 3 - [(1-FLUORO-4-METHYL-CYCLOHEXANECARBONYL) -ISOPROPYL-AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
- 3 - [(1-FLUORO-4-METHYL-CYCLOHEXANECARBONYL) -ISOPROPYL-AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
- 4 - [(2-CARBOXY-5-PHENYL-THIOPHEN-3-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -1-METHYL-PIPERIDINIUM CHLORIDE;
- 3 - [(2-ACETYLAMINO-4-METHYL-CYCLOHEXANECARBONYL) -ISOPROPYL-AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
- 3 - [(4-METHYL-CYCLOHEXANECARBONYL) - (4-OXO-CYCLOHEXYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(4-METHYL-CYCLOHEXANECARBONYL) - PYRIDIN-2-YLMETHYL-AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3 - [(4-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3 - [(4-HYDROXYIMINO-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3 - [ISOPROPYL - (4-METHYL-CYCLOHEX-3-ENECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3 - [(1-AZIDOMETHYL-2-METHYL-BUTYL) - (2,4-DICHLORO-BENZOYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
2 - [(2-Carboxy-5-phenyl-thiophen-3-yl) - (2-chloro-benzoyl) - amino] - 3-methyl-pentyl-ammonium trifluoroacetate;  
3 - [(1-AMINOMETHYL-2-METHYL-BUTYL) - (2,4-DICHLORO-BENZOYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
{2 - [(2-CARBOXY-5-PHENYL-THIOPHEN-3-YL) - (2,4-DICHLORO-BENZOYL) - AMINO] - PROPYL} - TRIMETHYL-AMMONIUM; TRIFLUORO-ACETATE;  
3 - [ISOPROPYL - (5-METHYL - [1,3] DIOXANE-2-CARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
4 - [{2-CARBOXY-5-(4-FLUORO-PHENYL) - THIOPHEN-3-YL} - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 1-METHYL-PIPERIDINIUM CHLORIDE;  
5 - (4-FLUORO-PHENYL) - 3 - [(2-HYDROXY-4-METHYL-CYCLOHEXANECARBONYL) - ISOPROPYL-AMINO] - THIOPHENE-2-CARBOXYLIC ACID;  
3 - [(4-METHOXYIMINO-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
5 - (4-FLUORO-PHENYL) - 3 - [ISOPROPYL - (4-METHYL-CYCLOHEX-1-ENECARBONYL) - AMINO] - THIOPHENE-2-CARBOXYLIC ACID;  
3 - [ISOPROPYL - (5-METHYL-TETRAHYDRO-PYRAN-2-CARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [ISOPROPYL - (4-METHYLENE-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [ISOPROPYL - (5-METHYL-TETRAHYDRO-PYRAN-2-CARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [ISOPROPYL - (5-METHYL-3,6-DIHYDRO-2H-PYRAN-2-CARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(2-HYDROXY-4-METHYL-CYCLOHEXANECARBONYL) - (TETRAHYDRO-PYRAN-4-YL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(2-AZIDO-1-METHYL-ETHYL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(4-METHYL-CYCLOHEXANECARBONYL) - (1-METHYL-PIPERIDIN-4-YLMETHYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(4-METHYL-CYCLOHEXANECARBONYL) - (TETRAHYDRO-THIOPYRAN-4-YL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - { [(2-CARBOXY-5-PHENYL-THIOPHEN-3-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -METHYL} -1-METHYL-PIPERIDINIUM CHLORIDE;

3 - [(2-AMINO-1-METHYL-ETHYL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(4-METHYL-CYCLOHEXANECARBONYL) - (1-OXO-HEXAHYDRO-THIOPYRAN-4-YL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

4 - { [(2-CARBOXY-5-PHENYL-THIOPHEN-3-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -METHYL} -1-METHYL-PIPERIDINIUM CHLORIDE;

3 - [(1-ETHYL-PIPERIDIN-4-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(1-ISOPROPYL-PIPERIDIN-4-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(4-METHYL-CYCLOHEXANECARBONYL) -PIPERIDIN-4-YL-AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [ [1 - (4-METHOXY-BENZYL) - 2-OXO-PIPERIDIN-4-YL] - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [ (2-AZIDO-1-METHYL-ETHYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

5 - (3-FLUORO-PHENYL) - 3 - [ (2-HYDROXY-4-METHYL-CYCLOHEXANECARBONYL) - ISOPROPYL-AMINO] - THIOPHENE-2-CARBOXYLIC ACID;

4 - [ (2-CARBOXY-5-P-TOLYL-THIOPHEN-3-YL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 1-METHYL-PIPERIDINIUM CHLORIDE;

3 - [ (4-METHOXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [ (4-METHYL-CYCLOHEXANECARBONYL) - (4-METHYL-CYCLOHEXYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [ (1-ACETYL-PIPERIDIN-4-YL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

4 - [ (2-CARBOXY-5-PHENYL-THIOPHEN-3-YL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 1-METHYL-AZEPANIUM CHLORIDE;

5 - (4-FLUORO-PHENYL) - 3 - [ (4-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - THIOPHENE-2-CARBOXYLIC ACID;

5 - (3-FLUORO-PHENYL) - 3 - [ (4-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - THIOPHENE-2-CARBOXYLIC ACID;

3 - [ (1-BENZYL-PIPERIDIN-4-YL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

5 - (4-FLUORO-PHENYL) - 3 - [ ISOPROPYL - (4-METHYL-CYCLOHEX-3-ENECARBONYL) - AMINO] - THIOPHENE-2-CARBOXYLIC ACID;

4 - [ [2-CARBOXY-5 - (3-FLUORO-PHENYL) - THIOPHEN-3-YL] - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 1-METHYL-PIPERIDINIUM; CHLORIDE;

4- [[2-CARBOXY-5-(4-METHOXY-PHENYL)-THIOPHEN-3-YL]-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM; CHLORIDE;

4- [[2-CARBOXY-5-(4-NITRO-PHENYL)-THIOPHEN-3-YL]-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM; CHLORIDE;

4- [[2-CARBOXY-5-(4-CHLORO-PHENYL)-THIOPHEN-3-YL]-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

4- [[2-CARBOXY-5-(4-CYANO-PHENYL)-THIOPHEN-3-YL]-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

5-(4-CHLORO-PHENYL)-3-[(4-HYDROXY-CYCLOHEXYL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-THIOPHENE-2-CARBOXYLIC ACID;

3-[(4-HYDROXY-CYCLOHEXYL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-5-(4-METHOXY-PHENYL)-THIOPHENE-2-CARBOXYLIC ACID;

5-(4-CYANO-PHENYL)-3-[(4-HYDROXY-CYCLOHEXYL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-THIOPHENE-2-CARBOXYLIC ACID;

3-[(2-HYDROXY-4-METHYL-CYCLOHEXANECARBONYL)-ISOPROPYL-AMINO]-5-(4-METHOXY-PHENYL)-THIOPHENE-2-CARBOXYLIC ACID;

3-[(1-FORMYL-PIPERIDIN-4-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3-[N',N'-Dimethyl-N-(4-methyl-cyclohexanecarbonyl)-hydrazino]-5-phenyl-thiophene-2-carboxylic acid;

3-[(4-METHYL-CYCLOHEXANECARBONYL)-(1-METHYL-1-OXY-PIPERIDIN-4-YL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3-[(4-METHYL-CYCLOHEXANECARBONYL)-(1-METHYL-1-OXY-PIPERIDIN-4-YL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3-[(2-AMINO-CYCLOHEXYL)-(2,4-DICHLORO-BENZOYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;



3 - [(4-METHYL-CYCLOHEXANECARBONYL) - (1-OXO-HEXAHYDRO-THIOPYRAN-4-YL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

5 - (4-FLUOROPHENYL) - ((4-METHYL-CYCLOHEXANECARBONYL) - 1-(METHYL-PIPERIDIN-3-YLMETHYL) -AMINO) -THIOPHENE-2-CARBOXYLIC ACID;

3 - [(1-METHANESULFONYL-PIPERIDIN-4-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(1-METHYLCARBAMOYL-PIPERIDIN-4-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [N-(2,4-Dichloro-benzoyl)-N',N'-dimethyl-hydrazino] -5-phenyl-thiophene-2-carboxylic acid;

or pharmaceutically acceptable salts thereof,

and at least one pharmaceutically acceptable carrier or excipient.

~~A pharmaceutical composition comprising at least one compound chosen from: 5-(4-FLUORO-PHENYL)-3-[(4-HYDROXY-CYCLOHEXYL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-THIOPHENE-2-CARBOXYLIC ACID;~~

~~3-[(1-METHYLCARBAMOYL-PIPERIDIN-4-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;~~

~~3-[(4-METHYL-CYCLOHEXANECARBONYL)-(1-METHYL-2-OXO-PIPERIDIN-4-YL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;~~

~~3-[(4-CARBOXY-CYCLOHEXYL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;~~

~~3-[(1-CYANO-PIPERIDIN-4-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;~~

~~3-[(4-CARBOXY-CYCLOHEXYL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;~~  
~~5-(3,4-DIFLUORO-PHENYL)-3-[(4-HYDROXY-CYCLOHEXYL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-THIOPHENE-2-CARBOXYLIC ACID;~~  
~~5-ACETYL-4-[(4-HYDROXY-CYCLOHEXYL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-[2,2'-BITHIOPHENYL]-5-CARBOXYLIC ACID;~~  
~~3-[(1-CARBAMOYL-PIPERIDIN-4-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;~~  
~~3-[(4-METHYL-CYCLOHEXANECARBONYL)-(7-OXO-AZEPAN-4-YL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;~~  
~~3-[(1-AMINOOXALYL-PIPERIDIN-4-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;~~  
~~3-[ETHYL-(4-METHYL-BENZOYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;~~  
~~5-(4-ACETYL-PHENYL)-3-[(4-HYDROXY-CYCLOHEXYL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-THIOPHENE-2-CARBOXYLIC ACID;~~  
~~3-[(4-HYDROXY-4-METHYL-CYCLOHEXYL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;~~  
~~3-[(3-HYDROXY-CYCLOHEXYL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;~~  
~~3-[(4-HYDROXY-4-METHYL-CYCLOHEXYL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;~~  
~~3-[(3-HYDROXY-CYCLOHEXYL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;~~  
~~3-[(3-HYDROXY-CYCLOPENTYL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;~~

~~or pharmaceutically acceptable salts thereof,  
and at least one pharmaceutically acceptable carrier or  
excipient.~~

49. (new) A pharmaceutical composition comprising at least one compound chosen from: 5-(4-FLUORO-PHENYL)-3-[(4-HYDROXY-CYCLOHEXYL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-THIOPHENE-2-CARBOXYLIC ACID;  
3-[(1-METHYLCARBAMOYL-PIPERIDIN-4-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3-[(4-METHYL-CYCLOHEXANECARBONYL)-(1-METHYL-2-OXO-PIPERIDIN-4-YL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3-[(4-CARBOXY-CYCLOHEXYL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3-[(1-CYANO-PIPERIDIN-4-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3-[(4-CARBOXY-CYCLOHEXYL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
5-(3,4-DIFLUORO-PHENYL)-3-[(4-HYDROXY-CYCLOHEXYL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-THIOPHENE-2-CARBOXYLIC ACID;  
5'-ACETYL-4-[(4-HYDROXY-CYCLOHEXYL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-[2,2']BITHIOPHENYL-5-CARBOXYLIC ACID;  
3-[(1-CARBAMOYL-PIPERIDIN-4-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;  
3-[(4-METHYL-CYCLOHEXANECARBONYL)-(7-OXO-AZEPAN-4-YL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(1-AMINOOXALYL-PIPERIDIN-4-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [ETHYL- (4-METHYL-BENZOYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

5 - (4-ACETYL-PHENYL) -3 - [(4-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -THIOPHENE-2-CARBOXYLIC ACID;

3 - [(4-HYDROXY-4-METHYL-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(3-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(4-HYDROXY-4-METHYL-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(3-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(3-HYDROXY-CYCLOPENTYL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHE-2-CARBOXYLIC ACID;

or pharmaceutically acceptable salts thereof,

and at least one pharmaceutically acceptable carrier or excipient.